Serial No. 10/009,948

Amendment Dated: November 30, 2006

Reply to Office Action Mailed: August 30, 2006

Attorney Docket No. 038819.50648US

## Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims**:

Claims 1-10. (Cancelled)

Claim 11. (New) A method of communicating, in an uplink mode, in a mobile communication system comprising a base station and a mobile terminal, the method comprising the steps of:

selecting a Channelization code, at random, from a plurality of available Channelization codes;

selecting a Training code;

encoding data according to the Channelization code, with a spreading factor dependent upon the selected Channelization code;

transmitting the Training code with the data;

detecting the Training code and the data;

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applying a set of rules to the Training code and spreading factor whereby to determine the Channelization code; and

decoding the data.

Claim 12. (New) A method as claimed in Claim 11, wherein the spreading factor of the randomly selected Channelization code is 16.

Claim 13. (New) A method of communicating, in a downlink mode, in a mobile communication system comprising a base station and a mobile terminal, the method comprising the steps of:

selecting a Channelization code;

selecting a Training code in accordance with a predetermined assignment sequence;

encoding data according to the Channelization code, with a spreading factor dependent upon the predetermined assignment sequence;

transmitting the Training code with the data;

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detecting the Training code and the data;

determining the training code sequence by the mobile terminal; and

applying a set of rules to the Training code and spreading factor whereby to determine the Channelization code; and

decoding the data.

Claim 14. (New) A method as claimed in Claim 3, wherein the predetermined assignment sequence is:

for Q = 16: 
$$\{m_1, m_0, m_5, m_4, m_3, m_2, m_7, m_6\}$$

for 
$$Q = 8$$
:  $\{m_6, m_2, m_4, m_0\}$ 

for 
$$Q = 4$$
:  $\{m_2, m_0\}$ 

for 
$$Q = 2$$
:  $\{m_0\}$ 

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where Q equals the spreading factor and  $m_j$  represents the available Training codes.

Claim 15. (New) A Code-Division Multiple Access mobile telecommunication system operable in accordance with the method as claimed in Claim 11.

Claim 16. (New) A code-Time Division Multiple Access mobile telecommunications system operable in accordance with the method as claimed in Claim 11.

Claim 17. (New) A time division duplex mobile telecommunications system operable in accordance with the method as claimed in Claim 11.

Claim 18. (New) A UMTS mobile telecommunications system operable in accordance with the method as claimed in Claim 11.

Claim 19. (New) A mobile terminal operable in accordance with Claim 11.

Claim 20. (New) A base station operable in accordance with Claim 11.